

CLAIMS

- 1 – A foldable bicycle (1) comprising a front wheel (4), a rear wheel (6), handlebars (7) to direct the front wheel, a frame (2), a saddle (9), and a mechanism so that a plane of the front wheel is parallel to a plane of the rear wheel and so that the front wheel is situated facing the rear wheel with their axes merged at the time of folding, characterized in that the bicycle comprises a mechanism for translation of the front wheel perpendicular to a plane of the bicycle.
- 5 2 – The bicycle according to claim 1, characterized in that the frame comprises a first channel (10) in a form complementary to a form of the handlebars, and articulation means of the handlebars so that the handlebars are housed in the channel at the time of folding.
- 10 3 – The bicycle according to one of claims 1 to 2, characterized in that the handlebars comprise a guide rod, a first handle (12) and a second handle (12.1), the first and second handles connected to the guide rod so as to fold along the guide rod at the time of folding the bicycle
- 15 4 – The bicycle according to one of claims 1 to 3, characterized in that the saddle comprises a second channel (16) in a form complementary to the form of the handlebars.
- 20 5 – The bicycle according to claim 4, characterized in that the saddle is formed by a seat (15) and by a seat post (9), the second channel being formed along the seat and along the seat post.
- 25 6 – The bicycle according to one of claims 1 to 5, characterized in that - the front wheel of the bicycle is connected to the handlebars by a monofork (24) that is situated on a first side of the plane formed by the bicycle,
- the rear wheel is connected to a crank gear wheel (8) that is situated on a second side of the plane formed by the bicycle.
- 30 7 – The bicycle according to one of claims 1 to 6, characterized in that the frame comprises at least one third channel (11) in a form complementary to a form of part of one of the two wheels.
- 8 – A method of folding a bicycle (1), characterized in that the method comprises the following steps
- 35 - handlebars (7) are folded in a first channel (10) formed in a frame (2),

- by rotation of the handlebars around a first folding axis (17),
- a saddle (9) is folded against the frame to overlap the handlebars by a second channel (16) formed by the saddle, by rotation of the saddle around a second folding axis (18),
- 5 - a front wheel (4) is displaced by translation perpendicular to a plane formed by the bicycle, then the front wheel is folded in the direction of a rear wheel (6) by rotation of the front wheel around a third folding axis (19), and
 - the rear wheel is folded in the direction of the front wheel by rotation of the rear wheel around a fourth folding axis (20).
- 10 9 – The folding method according to claim 8, characterized in that the rear wheel is folded in a first third channel (11) formed in the frame, and the front wheel is folded in a second third channel (34) formed in the frame.
- 10 – The folding method according to one of claims 8 to 9, characterized in that the rear wheel and front wheel are folded in the same third channel formed in the frame.
- 15 11 – The folding method according to one of claims 8 to 9, characterized in that the rear wheel and front wheel are folded respectively in a first third channel and in a second third channel formed in the frame.
- 12 – The folding method according to one of claims 8 to 11,
- 20 characterized in that the bicycle is raised vertically with relation to a plane of normal displacement of the bicycle before folding the front wheel and the rear wheel.
- 13 – The folding method according to one of claims 8 to 12, characterized in that a mud guard (29) is folded by rotation of this mud guard around a fifth folding axis (21) situated on the saddle.